To: Dermer, Michele[Dermer.Michele@epa.gov]

Cc: Bartling, Bill@DOC[Bill.Bartling@conservation.ca.gov]; Chamberlain,

Janel@DOC[Janel.Chamberlain@conservation.ca.gov]; Albright, David[Albright.David@epa.gov]

From: Kimber, Jeff@DOC Sent: Fri 6/24/2016 5:29:48 PM

Subject: RE: Tejon AE proposal- maps and cross-sectionsa

Michele,

I am available all day on Tuesday. The water samples in our database show 2400 ppm TDS beyond the oil/water contact (OWC). The generally consensus is that the adjacent Transition zone water is less than 3000 ppm TDS. The criteria by which to exempt the area beyond the OWC was originally questioned by the DOGGR prior to submittal to the Water Boards. However, the DOGGR chose to incorporate the area outside the OWC based on 40 CFR 146.4 b(1), because the water adjacent to the oil/water contact is hydraulically connected to the water beneath the oil and to the pore spaces that are oil saturated. And therefore, any well that pumps water from that portion of the aquifer would eventually draw in oil. I look forward to talking more about this on the 28th.

Best Regards,

Jeff Kimber

From: Dermer, Michele [mailto:Dermer.Michele@epa.gov]

Sent: Friday, June 24, 2016 9:01 AM

To: Kimber, Jeff@DOC <Jeff.Kimber@conservation.ca.gov>

Cc: Chamberlain, Janel@DOC < Janel. Chamberlain@conservation.ca.gov >; Bartling,

Bill@DOC <Bill.Bartling@conservation.ca.gov>; Albright, David <Albright.David@epa.gov>

Subject: FW: Tejon AE proposal- maps and cross-sectionsa

Good morning Jeff,

I am taking this issue back to the office to discuss further, and as Mike Montgomery noted at our meeting Tuesday, David Albright will be taking a look at this. I spoke with David yesterday and we think it would be a good idea to have a conference call with you to discuss further. I've reserved Tuesday, June 28 from 3-4 pm on David's calendar, although he has not confirmed, but

Do you have TDS information for the portion of the formation beyond the oil/water contact? If you do not have water samples can you calculate TDS from logs – wondering if its in the 3000-10,000 range?

Also, I had the impression this issue arose from a water board question, is that correct?

Thanks for any clarification you can provide. Lets try to get a brief conversation on the calendar.

Sincerely,

From: Kimber, Jeff@DOC [mailto:Jeff.Kimber@conservation.ca.gov]

Sent: Tuesday, June 21, 2016 4:27 PM

To: Dermer, Michele < <u>Dermer.Michele@epa.gov</u>>; <u>Shari.Ring@cadmusgroup.com</u> **Cc:** Chamberlain, Janel@DOC < <u>Janel.Chamberlain@conservation.ca.gov</u>>; <u>Bartling</u>,

Bill@DOC <Bill.Bartling@conservation.ca.gov> **Subject:** Tejon AE proposal- maps and cross-sections

Michelle and Shari,

Per our discussion about the Tejon aquifer exemption proposal, I have attached the map and associated cross-sections. As we discussed, the issue at hand is the criteria by which to exempt the portion of the aquifer beyond the oil water contact that is not hydrocarbon bearing (if not 146.4 b1, then b2). For optimal recovery of the hydrocarbons, it is crucial for that part of the aquifer to be exempt; to allow for water-flooding on the flanks of the oil-water contact.

Respectfully,

Jeff D. Kimber

Engineering Geologist

Department of Conservation

Division of Oil, Gas, and Geothermal Resources -Inland District

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